

#### ABSTRACT OF THE DISCLOSURE

A system is provided for controlling the inertia of a vehicle's powertrain during sudden braking events. Torque generated by rapid deceleration of the vehicle's drive wheels during braking is prevented from being transmitted through the vehicle's driveline by a clutch which disengages the drive wheels from high effective inertia components in the driveline. The clutch is actuated by a signal produced by any of several sensors on the vehicle which sense a sudden braking event. Driveline speed is adjusted to match drive wheel speed before the clutch is deactivated to reengage driveline with the drive wheels.